

**CLASSIFICATION, DIAGNOSIS AND PROGNOSIS OF ACUTE
MYELOID LEUKEMIA BY GENE EXPRESSION PROFILING**

ABSTRACT OF THE DISCLOSURE

The present invention relates to method of genetic analysis for the classification, diagnosis and prognosis of acute myeloid leukemia (AML). The invention provides a method for producing a classification scheme for AML comprising the steps of a) providing a plurality of reference samples, said reference samples comprising cell samples from a plurality of reference subjects affected by AML; b) providing reference profiles by establishing a gene expression profile for each of said reference samples individually; c) clustering said individual reference profiles according to similarity; and d) assigning an AML class to each cluster. The invention further relates to a method for classifying the AML of an AML affected subject, to a method for diagnosing AML in a subject, and to a method of determining the prognosis for an AML affected subject.